

CLAIMS

1. System for controlling a data network, comprising means for receiving quality of service requests corresponding to microflows of packets and control means for controlling elements of said data network, which system is characterized in that it comprises means for correlating the quality of service requests and the control means effect said control once only for all the correlated quality of service requests.
2. Control system according to claim 1, in which the correlation is effected by comparing the 5-tuples of said microflows.
3. Control system according to claim 2, wherein the correlation is effected by comparing the addresses of the sender and the addressee.
4. Control system according to any preceding claim, wherein said reservation means form a software module remote from said correlation means and communicating therewith by means of a communication protocol.
5. Control system according to any preceding claim, wherein said network elements may be monitored atomically.
6. Control system according to any preceding claim, wherein the control means are adapted to perform admission control prior to controlling said network elements.
7. Control system according to any preceding claim, wherein the control means are such that said correlated reservation requests share the same bandwidth.
8. Control system according to any preceding claim, wherein the correlation means are adapted to anticipate flows of return packets and to consider them to determine the correlated resource reservation requests.
9. Control device (CD) of a data network (N), comprising means for receiving quality of service requests corresponding to microflows and means for communicating with an admission controller (AC) for reserving the required resources within said data network, characterized in that it comprises means for correlating the quality of service requests and transmits a single resource reservation request to the admission controller for all the correlated quality of service requests.
10. Control device according to claim 9 wherein the correlation is effected

by comparing the 5-tuples of said microflows.

11. Control device according to claim 10, wherein the correlation is effected by comparing the addresses of the sender and the addressee.
12. Control device according to any of claims 9 to 11, wherein said correlated quality of service requests may share the same bandwidth.
13. Control device according to any of claims 9 to 12, wherein the correlation means are adapted to anticipate return microflows and to consider them for determining the correlated quality of service requests.
14. Admission controller associated with a domain of a data network (N), comprising means for receiving a single resource reservation request corresponding to correlated quality of service requests and control means for controlling elements of said domain, characterized in that it further comprises means for communicating said single resource reservation request to the admission controller associated with a second domain of said data network.